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## The Era of Chinese Global Hegemony: Denaturalizing Money in the Early Modern World



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### Résumés

English Deutsch Français

This article argues that the commodity “nature” ascribed to early modern money should be understood as an ideological effect of Chinese domination of the early modern global monetary system. In the three centuries before 1800, Chinese demand for silver anchored a global system that made silver valued by weight and fineness the apparently natural money of the world, just as it in late Ming and Qing China. We argue that this naturalization should be understood as resulting from Chinese power, and that the early modern era is perhaps best understood as an era of Chinese global hegemony. We follow the effects of this Chinese monetary hegemony through three different fields. First, we trace it through early modern English financiers and philosophers’ formulation of the ideal qualities of a universal money, deliberately based on the Chinese model. Second, we show the importance of Chinese demand for silver for evoking and determining the character of the British Empire in India. And finally, we show how officials naturalized silver as money in early modern Ottoman statecraft

Der Artikel argumentiert, dass die „Warenatur“, welche Geld in der frühen Neuzeit zugesprochen wurde, als ideologische Auswirkung einer chinesischen Dominanz des damaligen globalen Geldsystems verstanden werden sollte. Dabei wurde Silber, gemessen nach Gewicht und Feinheit, als scheinbar „natürliches“ Geld der Welt angesehen. Die chinesische Nachfrage nach Silber unterlegte dieses System, in den drei Jahrhunderten vor 1800 wie schon in der späten Ming und Qing-Zeit. Wir argumentieren, dass diese Naturalisierung von Silber als Geld als Resultat chinesischen Einflusses verstanden werden sollte, und analog die frühe Neuzeit als Zeitalter einer chinesischen finanziellen Hegemonie. Die Auswirkungen dieser Hegemonie werden auf drei verschiedenen Feldern untersucht. Zunächst werden die Debatten englischer Finanziere und Philosophen hinsichtlich der idealen Eigenschaften eines universalen Geldsystems betrachtet, welche bewusst auf das chinesische Model Bezug nahmen. Im Anschluss wird die Bedeutung der chinesischen Silbernachfrage für die Ausformung britischer Herrschaft in Indien beleuchtet. Schlussendlich wird aufgezeigt, wie Beamte im Osmanischen Reich des 18. Jahrhunderts Silber als Geld naturalisierten

Cet article s’efforce d’illustrer comment, au début de l’époque moderne, l’idée d’une monnaie-marchandise peut être comprise selon un angle idéologique en lien avec l’hégémonie chinoise sur le système monétaire globale. Pendant trois siècles, jusqu’en 1800, la demande chinoise en métaux a formalisé un système global dans lequel l’étalon monétaire a été naturalisé argent du monde et évalué selon son poids et sa finesse comme dans les dernières périodes Ming et Qing en Chine. Nous avançons l’idée que cette naturalisation devrait être comprise comme le résultat de l’influence chinoise et que,



par conséquent, la première époque moderne constitue une ère d'hégémonie globale chinoise. Cet article contribue à évaluer les effets de cette hégémonie monétaire à travers trois dimensions. D'abord, nous examinons que les théories émises au début de l'époque moderne par les financiers et philosophes anglais concernant les caractéristiques idéales de la monnaie universelle se fondent sur le modèle chinois. Ensuite, nous démontrons l'importance déterminante de la demande chinoise en argent dans la constitution de l'Empire britannique en Inde. Enfin, nous nous intéressons à la manière dont les fonctionnaires ottomans ont naturalisé l'argent comme monnaie dans le cadre de l'exercice du pouvoir étatique

## Entrées d'index

**Mots-clés :** Global History, hégémonie chinoise, argent, théorie monétaire, Empire ottoman, Inde, Grande-Bretagne, colonialisme

**Keywords:** Global History, Chinese Hegemony, Silver, monetary Theory, early Modernities, great Divergence, Ottoman Empire, India, Britain, Colonialism

## Texte intégral

# Introduction “...and so forward into China.”

1 In recent years much of global history has focused on provincializing Europe. Historians have effectively demonstrated that Janet Abu-Lughod's claim – that there was not “any inherent historical necessity that would have prevented the cultures in the eastern region from becoming the progenitors of a modern world system” – is correct.<sup>1</sup> However, work on the rough parity of multiple “early modernities” and nascent “world systems” may obscure a more fundamental imbalance in the early modern world: China's domination of global trade between the sixteenth and nineteenth centuries.<sup>2</sup>

2 China's domination consisted of just this: most of the world's trading powers, from Europe to South Asia, had a trade deficit with China and its East Asian tributary system from the late sixteenth-century to the early nineteenth. This, in turn, allowed China to define the terms of trade. Chinese traders demanded silver to pay for their tea, silk, porcelain, and gold, just as, since the sixteenth-century, the Chinese state had demanded silver in taxes. By doing so, China defined money for the trading world: silver valued by weight and fineness.<sup>3</sup> “Silver is blood”, Chinese traders would say to their counterparts in Spanish Manila, and China itself, in the words of the Portuguese historian Vitorino Magalhães Godinho, was the suction-pump, the *bomba-aspirante*, that carried it around the globe.<sup>4</sup>

3 This turned out to have significant effects. Early modern societies that had long defined their monies in terms of silver were faced with a new fact. Regardless of what states might do to adjust their currencies through traditional means, silver would always be worth more elsewhere. This fact helped delegitimize state control over money, while seeming to open up new opportunities for those able to harmonize their monies with the global, Chinese standard. In Europe, Chinese demand helped establish for many influential thinkers that money was necessarily a commodity, not a unit of account that varied at will of the sovereign, and, in turn, prompted them to develop or support new institutions – banks, trading companies and global empires – to deal with it on those terms. As such, China seems, in the early modern era, to have taken on the role in essence of a global hegemon – a power that rules through establishing and enforcing rules rather than, in most cases, through the direct application of force.<sup>5</sup> The era where Chinese rules defined global trade, from roughly the mid-sixteenth-century until the last decades of the eighteenth, then, might be thought of as the era of Chinese global hegemony. Moreover, it suggests that Chinese hegemony might be conceived of as a necessary precondition for the development of European capitalism. Future global hegemons would build on the structure that Chinese demand helped establish, but would never efface it.

4 The notion of China as the great Early Modern hegemon is open to a number of criticisms – not least that it relies on a contemporary, if not strictly presentist, category in order to help illuminate a historical process. Likewise, Chinese demand for silver can be, and typically has been, seen as part of a broader and longer history of monetary metals that in many places



These concerns are significant. However, we believe that the notion of Chinese hegemony illuminates a unifying aspect of early modernities that have long been obscured by the latent Eurocentrism of European historiography.

5 In particular, European capitalism, as conceived by theorists from Karl Marx and Max Weber to Immanuel Wallerstein, has been seen as arising endogenously in a European context and expanding from there. While this approach has produced important insights, grounding the comparative global work of Kenneth Pomeranz and others, it has also reinforced long-standing blind spots. In order to draw clean comparisons between institutional and resource endowments, it tends to treat regions as if they are culturally and intellectually autonomous, when, as we know from new scholarship on global encounters and hybridity this was not the case.<sup>6</sup> In particular, it has tended to take the terms of trade, if not the facts of trade, for granted, serving to obscure the effects of Chinese hegemony in the historical record.

6 Our analysis suggests that Chinese demand for silver helped determine the shape of money as it would come to be embedded in the institutions of European capitalism and empire. Early modern intellectuals in Europe and elsewhere used the universal demand for silver and its steady increase in value as it progressed into China, as the empirical justification for defining silver as money, in as much as money is what another person, even halfway around the globe in Cairo, Lima, or Nagasaki, will receive to settle a debt. Simultaneously, the universal demand for silver and resulting “scarcity of money,” a common concern in seventeenth-century, created a perceived need for institutions to multiply the effective stock of silver on hand, be it in Northern Europe or in the Ottoman Empire. In Europe, new banking institutions subverted the simple, bullionist understanding of money as a commodity to be sure, creating a medium of exchange infinitely more flexible and expansive. But what was more important, and perhaps the most significant legacy of Chinese hegemony, was not that money itself was silver or gold, but that it was treated as a commodity in commercial relations. This development, we argue, should be seen as a reaction to scarcity conditioned by what we can productively term Chinese hegemony.

7 This essay has four parts. First, we sketch the history of money and silver in Eurasia leading to the era of Chinese hegemony. Second, we show how Atlantic trade conditioned by Chinese demand reshaped notions of money in early modern England, in the writings of the mercantilists of the 1620s and, decisively, John Locke at the turn of the eighteenth-century. Thirdly, European financial institutions did not eliminate the need or the profitability of sending silver east in the eighteenth-century or alter its status as the money of the world. They reinforced and naturalized it. As the East India Company’s disastrous management during its first years administering Bengal shows, this had significant effects. East India Company managers defended the concept of money as necessarily a commodity, and necessarily silver, on empirical grounds. They needed silver to feed the China market. England and the British Empire are therefore at the core of our analysis of the Chinese global hegemony. In our view, Britain helps our argument insofar as it represents the conceptual *trait d’union* between the East and the West. The flow of money eastward determined by the Chinese basin of attraction bred fruitful reflections on the categories of money and credit that led to profound reforms which, in turn, endowed Britain with the institutions to profit from the fading of Chinese supremacy. The Chinese silver baton passed over to Britain and turned into the gold standard of the nineteenth-century. Finally, our investigation of the role silver played as an apparently natural counter in the international balance of trade in early modern Ottoman statecraft suggests the degree to which silver was naturalized in non-European contexts conditioned similarly by Chinese demand.<sup>7</sup> By focusing on the case of the Ottoman Empire, we aim to show how intermediary regions, often only analysed in their growing interaction with Europe, were similarly subject to the outflow of specie to the East in the eighteenth-century. While subject to similar forces, Ottoman statesmen reacted in different ways to the British: primarily interpreting the shortage of silver as a question of state sovereignty, with actors calling on state power as a possible panacea.

8 In short, our analysis suggests that before the Great Divergence between the salt-water empires of Europe and land-empires of Central and East Asia in the nineteenth-century, there was a Great Convergence around the terms of trade.<sup>8</sup> Societies seeking stakes in a global trading system dominated by Chinese demand for silver embedded a common definition of money as silver valued by weight and fineness in their financial and political



given the scope of our admittedly provocative proposal. We hope, however, in particular that our analysis provides a framework for further denaturalizing the role that monetary metals, and silver in particular, played in creating the conditions for early modernity, seeing them instead as shaped by culture, power and historical contingency.

## “Swaying the Wide World”

“You, O King, live beyond the confines of many seas, nevertheless, impelled by your humble desire to partake of the benefits of our civilization, you have dispatched a mission respectfully bearing your memorial... Swaying the wide world, I have but one aim in view, namely, to maintain a perfect governance and to fulfill the duties of the State.” ~ Qianlong Emperor to George III, 1793.<sup>9</sup>

9 Chinese demand for silver indeed swayed the wide world. As Dennis O. Flynn and Arturo Giraldez have argued, global trade truly began in 1571, with the founding of Spanish Manila. There, every year, huge amounts of silver minted in Mexico arrived from Acapulco for the Chinese market, having travelled more than 14,000 km across the Pacific Ocean. In the early seventeenth-century, some 128 tons of silver, or 5 million pesos, arrived annually across the Pacific. Meanwhile, Europeans sent another 150 tons of silver annually east around Cape Horn, and an as yet unquantified amount overland, through Central Asia. All of this silver converged in the vast East-Asian “interregional trading zone” with China at its centre and ultimate sink. China was able to absorb this silver, largely due to its size and longstanding status as the dominant regional power. Its borders contained about one quarter of the world’s population, more than 300 million people, and its rulers presided over what Fernand Braudel called the “greatest of all world-economies,” stretching from Mongolia to modern-day Indonesia. This region consumed and circulated a massive amount of silver in the early modern era. According to Takeshi Hamashita, at the beginning of the eighteenth-century the Chinese annual tax quota alone was 60 million ounces of fine silver, or 2,100 tons per year.<sup>10</sup>

10 While China itself had always been powerful in East Asia, its global sway arose gradually, through a culmination of historical accidents. Before the thirteenth-century, Akinobu Kuroda has argued, global money was divided into a number of relatively autonomous spheres. Then, in 1276, the Mongol Yuan Dynasty under Kublai Khan conquered the southern Song Dynasty and discovered a hoard of some 7,000 tons of un-coined silver. This hoard joined a stream of silver that was already pouring out of East Asia following Mongol armies on the march. In China itself, the Yuan had moved in 1260 to adopt a series of taxes in silver aimed at centralizing the control of precious metal and replacing it in internal commerce with a paper currency, the *Zhongton Chao* convertible to silver at the border. This freed up the actual silver to serve for use in administrative payments in conquered regions, where it was often far more valuable. As a result, a vast supply of silver spread across Eurasia in the thirteenth-century, flooding into mints as far away as England, Bengal and the Delhi sultanate.<sup>11</sup>

11 The fall of the Yuan Dynasty in 1368, however, changed matters. Eurasia split again as the Mongol Empire fragmented, and local circumstances led societies down different paths. The specie supply in Europe contracted significantly, giving rise to the widespread use of what the Italian economist Luigi Einaudi called imaginary monies, ideal units of account that allowed merchants to minimize the use of specie in trade. By the sixteenth-century, a distinction between national abstract units of account and concrete means of payment characterized the internal European payment system as a whole, managed by brokers versed in the value of local monies, and thus able to settle accounts in long distance trade. These units, in turn, were under political control, subject to being called up and called down in value, relative to various coins as individual rulers dictated. As the English Privy Council put it in deciding *The Case of Mixed Money* in 1605, money inhered “in the bones of princes”<sup>12</sup>. It was seen as an essentially sovereign domain.

12 Meanwhile, in China the collapse of Yuan paper monies led, eventually, to the adoption of a two-tier system where silver valued by weight and fineness was used as store of value and for large commercial transactions, while copper coins minted by the state and private parties served as the currency of everyday life. In terms of local exchange, Europe had become a credit dominant society, while China was currency dominant. Regions the Mongols had



- 13 Silver continued to play a role in many Eurasian societies, to be sure, but not the same role.<sup>13</sup>
- 13 This is how things stood in 1545, when the Spanish discovered silver at Potosí high in the Andes Mountains in modern day Bolivia. At first, the silver flooded into Europe, but it did not stop there. In 1478 Portuguese traders had found their way into the Indian Ocean, bringing Europe into closer contact with the Chinese world than ever before. Early traders soon discovered that “He who would bring back the riches of the East must take the riches of the East with him,” as one English trading proverb put it.<sup>14</sup> American silver offered the means for doing so, opening up markets that had heretofore been closed to large-scale east-west trade.
- 14 Very shortly, European traders – first the Portuguese, then the Spanish, Dutch, English, French and others – learned two things: First, that China and its tributary sphere – which they entered when they traded in the East, as part of what John Fairbanks called its “Outer Zone” governed by material interest – had little use for European merchandise and only wanted silver. In short, China set the terms by which any “balance of trade” in East Asia might be balanced. Silver was how, in Hamashita’s analysis, the Chinese tributary system defined its trade relationships with “neighboring trade zones” like those of India, the Islamic region and now Europe. And second, they learned that silver bullion was more valuable in China than anywhere else in the world, more than repaying the costs and dangers of long distance trade, and, for that matter, the trade with intermediaries along the way. As merchants transported silver eastward across Europe and Asia, its price rose steadily, from Spain to the Low Countries and Italy, and from Russia and the Ottoman Empire to what is now Iran, “and so forward into China”, the English author Rice Vaughn noted in 1675.<sup>15</sup> It stopped there, the pinnacle of world valuation. For Vaughn’s contemporaries this was a self-evident truth. Silver was worth more in Amsterdam or Paris than it was in London, and more still in Constantinople or Muscovy, as one got closer to China. At the turn of the sixteenth-century silver was worth almost twice as much, in terms of gold, in China than in Spain, while Chinese goods were worth significantly more abroad. The combination drove silver to China. As Flynn and Giraldez put this: “Demand-side causation was of Asian origin, to which the rest of the world reacted.” Societies using silver as money also had to adapt to a new way of the world.<sup>16</sup>

## Rethinking money: British monetary debates in the seventeenth-century

- 15 In a matter of decades, Europe and East Asia were in direct contact again, with silver as the medium of exchange. Whether mined in Potosí or Zacatecas, floated east down the Rio de la Plata (“river of silver”) to Argentina (“land of silver”), or carried west from the mint in Mexico City to ships in Acapulco, silver was headed to China. It was not headed there for any natural reason, to settle any notional money “balance”, but because people were aware of the extraordinary wealth silver could procure in Asia, or, for the less adventurous, in incremental arbitrage on the way east. European trading companies competed to get a piece of this flow, through the violent appropriation of Spanish silver, purchase and direct transport from Europe, the appropriation of existing trade routes, or by serving as intermediaries in the Pacific or the Indian oceans for those, like the Japanese, who already benefited from the China trade. Getting a piece of the silver flow was necessary to make the East Indies trade pay.<sup>17</sup>
- 16 The basic fact of the silver trade, and the essential coercive element of Chinese hegemony, was that unless you were in China or directly on the road to it, silver was a fleeting thing. This was apparent even in regions with little direct relationship to the eastern trade. British colonists in North America, for instance, who earned silver in their commerce with the Caribbean and Southern Europe, were painfully aware that no “supply” of specie could be counted to stay in their colonies. “*Silver in New-England is like water of a swift Running River, always coming, and as fast going away,*” the prominent Boston minister Cotton Mather wrote in a pamphlet published in 1691. This was not a problem, per se, unless the influx stopped, but that was always contingent on matters well out of a single nation or colony’s control. Mather’s deeper point was that even on the periphery, silver was always in



directed motion east. It was not “an abiding cash” like the bills of credit Mather and his fellow New Englanders developed as a local substitute, in part because with paper “no man will carry it out to another Country.” Silver, on the other hand, was always needed elsewhere. “All the West European companies trading to the East Indies had difficulty selling [European wares in Asia], and found it necessary to export silver and some gold to balance their trades,” the Atlantic trade historian Jacob Price remarked in *Overseas Trade and Traders*. “For the English company this pressing need for silver was only relieved when that organization started collecting local taxes in Bengal in the 1760s,” which, as we will see, came with a hefty human price of its own.<sup>18</sup>

17 Neither prices in the east, nor the supply of silver from American mines was constant, even if broad contours of West-East arbitrage remained so from the late sixteenth-century on. The resultant flows, and significant ebbs, of silver caused a great deal of intellectual ferment in Europe. In the seventeenth-century, it raised questions with regard to the nature of money. This debate, as it played out in England, is less interesting for its specific content, at least for our purposes, than for its shared assumptions. Both sides in monetary debates from the 1620s on assumed that money, whether made of paper, gold or silver, must be a thing, a commodity, or the paper representation of a commodity. And they agreed that silver was the thing that had become the “money of the world.”

18 This is striking when we compare it to the way money had worked in credit-dominant English society just a century earlier, before the eastern trade was a significant force in European affairs. Silver coin in sixteenth-century England, as Craig Muldrew has shown, was less significant as a medium of exchange, where it was virtually absent, than as a “measure in the pricing of all things.” Its scarcity was a social asset, because it preserved price stability for local and regional exchange done on credit, either with formal instruments like the bill of exchange or book notation and verbal agreements. Yet by the seventeenth-century, as Carl Wennerlind argues, “it was abundantly clear that this kind of credit was woefully inadequate to alleviate the present scarcity of money problem.” Wennerlind’s analysis itself, though, reveals something of the fundamental transformation taking place. A money that functions fundamentally as a measure cannot be scarce. Or rather, its scarcity, like itself, is immaterial. This is a point made by Craig Muldrew, Peter Spufford and Daniel Lord Smail, in considering the “bullion famines” of the late Middle Ages, when they argue that credit based ultimately on payment goods, rather than coin – though accounted for in ledgers and credit instruments in terms of moneys operating as a means to express value – expanded to fill the gaps in trade. The debate Wennerlind describes in the early seventeenth-century regarding “scarcity”, then, was quite different and new, if not wholly unprecedented. The problems seventeenth-century thinkers associated with the “scarcity of money” are problems associated specifically with a scarcity of silver. This “scarcity”, in turn, was conditioned by the fact of Chinese demand compounded with slacking supply from the Andes since the beginning of the seventeenth-century.<sup>19</sup>

19 Seventeenth-century debates over the “scarcity of money”, then, suggest a significant transformation in the minds of elite thinkers on “money” and their interests regarding it. It suggests that English thinkers were dealing with new facts. To be sure, quotidian monetary practice changed very slowly. As late as 1813, Thomas Jefferson estimated that as little as one thirtieth of transactions in the United States involved any cash at all, and operated on a recognizable variation of Muldrew’s “economy of obligation.” But the change in elite thinking and its causes are significant because it would shape institutions and statecraft for centuries ahead.<sup>20</sup>

20 Clearly, the complex link between elite perceptions of monetary circulation and their proposals for institutional reform cannot be reduced to one factor. Moral resentments related to *usura pecuniae* of moneylenders and pawnbrokers played an important role in the discussion regarding the expansion of monetary credit in the first half of the seventeenth-century, as did many specific social and intellectual factors. However, historians have long recognized that the erratic flow of silver within and without seventeenth-century England was a serious problem for contemporaries.<sup>21</sup> This drain was the primary motivation of the stream of proposals meant to supply the country with enough silver for commerce to flourish. These proposals, in turn, progressively eroded the intellectual boundaries of mercantilist doctrine. If, initially, expanding credit facilities was perceived as a means to set manufactures on their feet in order to bring in bullion, from mid century the attention turned to money’s role to commerce and trade, and possible substitutes for specie.<sup>22</sup> This



innovative perspective created fertile ground for the first banks issuing credit on the strength of merchandise, land or government revenues. The fact that throughout the seventeenth-century, pamphleteers proposed hundreds of schemes for the institution of public credit not only shows contemporaries' awareness of the need to reform a system whose inconsistent behaviour caused disruption in the economic and social tissue of the Kingdom, but more importantly for our purpose, underscores the existence of a factual connection between the scarcity of silver money and the birth of England's financial institutions.

21 This transition has not been broadly considered in economic literature, which has tended until very recently to share the same assumptions regarding money as a specialized commodity as Wennerlind's subjects. One interesting exception is Michel Foucault's essay on "Exchange" in *The Order of Things* which attempted to explain the philosophical shift away from what Muldrew's latter dubbed the economy of obligation. In the sixteenth-century, Foucault wrote, "economic thought is restricted, or almost so, to the problem of prices and that of the best monetary substance." Thinkers were primarily interested in the best means of establishing a unit of account in relation to particular metals operating "as a sign for measuring wealth, in so far as it was itself wealth." Problems arose, and the modern conception of money began, Foucault argued, when thinkers confronted the fact that "money" in international trade was a "commodity like any other – not an absolute standard for all equivalences, but a commodity whose capacity for exchange, and consequently whose value as a substitute in exchange, are modified according to its abundance or rarity: money too has its price."

22 If money had a price, it could not be the ideal embodiment of price itself – a problem early economic thinkers wrote about paradoxically, Foucault argued, because the contradictions observed by writers like Adam Smith a century later had no meaning for them. This suggests a significant epistemic disjuncture. By the early twentieth-century, John Maynard Keynes wrote in his "Notes on Mercantilism," seventeenth-century monetary thought appeared to most to be "based, from start to finish, on an intellectual confusion."<sup>23</sup> Where Keynes proposed a "scientific" explanation for this confusion and Foucault an ontological one, the hypothesis of Chinese hegemony suggests a phenomenological alternative. The seventeenth-century focus on silver flows and balances of "treasure" become more intelligible, when we consider the effect that the expansive global trade in silver was having in Western Europe. To be sure, the "East Indies" trade merely exacerbated existing difficulties arising from cash payments to the Baltic, which sent silver east overland via Muscovy, but they were considered significant at the time. The English founded their East India Company in 1600, and the Dutch their United East India Trading Company in 1602. Both companies immediately began exporting silver. The East India Company's 1600 charter gave it the exclusive right to export up to £30,000 in silver "Coin or monies" every year (a sum that increased to £50,000 in 1661), as well as the right to re-export any silver acquired elsewhere. Actual exports east were far larger, and grew rapidly in the last half of the century. In the 1659-60 season the Company exported £46,329 of silver in bullion and Spanish dollars; a half century later, it exported £420,456. The scale of the "drain," as eighteenth-century writers termed it, were significant. Millions of pounds-sterling worth of silver were re-minted during the "Great Recoinage" of 1696. By 1762, according to John Brewer there was only £800,000 worth of silver coin in all of Britain.<sup>24</sup>

23 Thomas Mun, an East India Company director, and the other men who defined "mercantilism" in the early seventeenth-century, picked up their pens precisely to defend these exports - the trade in silver with the India, China and Southeast Asia for spices, silk, cotton fabric, and tea. "Foreign trade is the rule of our treasure," Mun wrote in one of the defining early works of neo-Aristotelian thought. At the time, this view on money was subversive, even radical. It counteracted centuries of official English policy where the crown's determined the value of money, not trade. But Mun's analysis was plausible because in the 1620s there was not enough silver in England to perform basic administrative functions, leading to widespread complaints of a "scarcity of money." Mun's argument suggested that the state's problem, trade, was its own solution, if only the balance with foreigners was reversed, allowing "treasure" to flow back in.<sup>25</sup> In the public mind, the East India Company exportation was a significant aggravating factor in the "scarcity of money", with reason. Once one started focusing on how specie moved, it became apparent that there were only two kinds of trades. Those that brought it in, and those "two main branches of trade – the East Indies and the Baltic – where bullion export was a permanent, though an



unpleasant activity. Regardless of whether the Company brought more wealth to the nation than it extracted, as Mun argued – which was likely, given the value of silver in China – in the short term, there was an acute lack of taxable specie available.

24 Shipping silver abroad could not help, regardless of its effect in the long term. The lack of silver, in turn, weakened the state in several ways. Less coin meant the state was less able to spend abroad on war *matériel* or expeditionary forces. Without sufficient coin available, royal taxation like the “Ship Money” taxes of 1628 and 1634 created civil unrest, and tax resisters like John Hampden became heroes. This was no small matter: English parliamentary rebels cited the king’s taxation in justifying their resistance during the first English Civil War. In opposition to Mun, advocates of a new credit currency hoped to solve the “scarcity of money” problem via institutional means, eventually settling on a bank based on existing European models. Both the neo-Aristotelians and credit-minded thinkers assumed “more” was the only answer, and that “debasement” of the silver currency or altering its value in terms of pounds, shillings and pence, was not.<sup>26</sup> Again, the forcefulness of this attitude was new, and rooted in Europe’s foreign trade, and growing colonial possessions.

25 For almost one thousand years, from Charlemagne to Napoleon, the European monetary system was characterized by the institutional distinction between the unit of account (or imaginary money) and the means of payment, and a strong state role in pricing – what Einaudi called the “system of monetary mutations.” In Britain, the final transition away from this system can be traced to the 1690s, when England underwent a colossal re-coinage of the clipped and worn out money of the Kingdom, founded the Bank of England, and arguably laid the institutional foundation for English capitalism.<sup>27</sup> The outbreak of the Nine Years war in 1689 found the English kingdom in the urgent need of funds to pay for the troops on the continent, Hudson Bay and Madras. William sought relief by increasing taxation first – the land tax was introduced in 1692 – and by issuing tallies, tontine and lotteries later, until chartering the Bank of England in the summer of 1694 finally did the trick. According to Feavearyear, the combined effect of these instruments caused a significant credit inflation that led to a surge in the price of silver and gold.<sup>28</sup>

26 At the same time, the need for a general re-minting of the coins of the realm was deeply felt among contemporaries because damage to the coins themselves had reduced their value.<sup>29</sup> Almost a century had passed since the last coinage was executed in 1601, and coins were so worn out by use (and abuse) that Macaulay in his *History of England* sentenced that “... it may well be doubted whether all the misery which had been inflicted on the English nation in a quarter of century by bad Kings, bad Ministers, bad Parliament, and bad Judges, was equal to the misery caused in a single year by bad crowns and bad shillings”.<sup>30</sup> The business of counterfeiting moneys was lucrative and rarely prosecuted by authorities.<sup>31</sup> It was hard to uncover and was often popular in any case, as it eased the acute shortage of silver generated by a renewed demand in China at the turn of the century, where the Qing Dynasty had finally established control of the interior and were open for business.<sup>32</sup> After decades of debate, pressures for dealing with money and the coinage mounted, sparking a renewed debate about possible solutions.

27 John Locke entered the controversy, albeit anonymously at first, with a pamphlet titled *Some Considerations of the Consequences of the Lowering of Interests and the Raising the Value of Money* over the monetary reform in 1691. He argued in favour of re-minting worn out silver coins into the old standard, reinforcing the specie to the value of the year 1601 and letting them pass by weight, rather than face value, in the interim – making silver a “measured currency” in England as it was in the broader, trading world. Locke’s belief that “an ounce of Silver can never rise or fall in respect to itself”, made him refute the possibility of traditional solutions based on the king’s power over the unit of account to address the “scarcity” problem. In effect, he believed the only answer was to create what China already had. If the face value matched the intrinsic value, the thinking went, there would be less incentive to send currency abroad. “...your Debts beyond Sea, to answer the Over-balance of Foreign Importations, call for your Money, ‘tis certain the heavy Money, which has the full Standard Weight, will be melted down and carried away: because Foreigners value not your Stamp or Denomination, but your Silver”, Locke wrote. The only way to combat this was to set silver coin in harmony with its value as “money.” Money, like other goods, was a commodity, Locke wrote, with the difference being that it was exchanged rather than consumed, and the people would be better served if it were treated that way, and sovereigns



28 “Men in their bargains contract not for denominations or sounds but for the intrinsic value; which is the *quantity* of Silver by public Authority warranted to be in pieces of such denominations,” Locke wrote. “And tis by having a greater quantity of Silver, that men thrive and grow richer, and not by having a greater number of denominations”, which prove to be but “empty sounds” if the silver is not there.<sup>34</sup>

29 This was another revolutionary argument. Early advocates of what has come to be called mercantilism had objected to debasing the coinage or altering its value because of the primacy of trade. But they still recognized the power inherent in privileging national units account. As Timothy Brook has noted, no European state in the seventeenth-century, including England, “allowed its merchants to set prices by weight in un-minted silver, which was the Chinese practice at this time”.<sup>35</sup> Locke, however, was suggesting that the content of the term “money” itself needed to be rethought. Traders’ experience with silver was crucial for his empirical argument.

30 The coincidence here between the Chinese standard of weight and fineness in what they called “horse hoof silver” because of the shape of the refined ingots used in high-value trade, and Locke’s proposition for valuing currency by is telling. Locke was not directly influenced by the Chinese example, except, perhaps, through hear-say. But he was decisively influenced by the fact that Atlantic merchants and European trading companies accounted for silver in terms of weight because, ultimately it was destined for the China market.

31 Likewise it is telling that Locke picked “Silver Coin alone,” not gold, which was also current in England, as the “Money of account, and measure of Trade, all through the World.” While there were “many reasons” why silver was the “fittest” metal to be made money by weight, Locke wrote in 1695, “It is enough that the world has agreed in it, and made it their common Money; and as the Indians rightly call it Measure. All other Metals, Gold, as well as lead, are but Commodities.” This too, appears to have been based on practical experience. The East India Company did occasionally export gold for use in South India, but during the re-coinage controversy, from 1694 through 1700, it exported £1.8 million in silver and no gold at all. The lesson was clear. Silver, Locke wrote, was the “Money of the World.”<sup>36</sup>

32 The Great Coinage has a complex legacy. Historians interested in Locke’s and Sir Isaac Newton’s stated goals (the engrossment of English treasure), declared it a failure. Others, like Carl Wennerlind and Christine Desan, have argued that it was successful at accomplishing its unstated aim: to equate the English pound sterling with a specific weight and fineness of standard, which in turn bolstered the valuation of the bank monies and other instruments developed to ameliorate the “shortage of money” for the connected few. But one of the deeper reason for equating English money with silver by weight, though plainly cited in Locke and Newton, has rarely been considered.<sup>37</sup>

33 Locke and his contemporaries called silver bullion the “Money of the World” and based their new money on it because of facts established by Chinese demand. Newton declared in 1717 that “In China and Japan one pound weight of fine gold is worth but nine or ten pounds weight of fine silver, & in East India it may be worth twelve. And this low price of gold in proportion to silver carries away the silver from all Europe.”<sup>38</sup>

34 The institutions that were developed preserved the sense of scarcity around money, its essential commodity character, while allowing greater flexibility in practical statecraft and commerce. English statesmen publicly equated the pound with silver for at least another century, prompting Thomas Paine to brag in 1796 that he had “exposed the English system of finance in the eyes of all nations,” when he revealed the Englishmen paid their taxes in banknotes instead of coin. The Bank of England suspended payments in gold in 1797, asserting a new kind of power over gold and silver as money. But the English financial revolution, while consequential for the development of capitalism, did not solve the scarcity of money problem outside of England, in the China trade itself. For that, the English and others turned to empire.<sup>39</sup>

## Silver, the East India Company and Death in Bengal



The intellectual and institutional commitment to money as a scarce commodity equated to

a given sum of silver (or gold) measured by weight or fineness, can be understood as an example of what political theorists John Ikenberry and Charles Kupchan termed the “socialization” of “secondary nations” acting under a hegemon. The hegemon, rather than employing direct coercion, acts on the level of leaders “substantive beliefs.” This, they write, is part of “the projection by the hegemon of a set of norms” to be accepted by less powerful players on the world stage.<sup>40</sup> In Ikenberry and Kupchan’s analysis, informal hegemony is both less coercive than formal empire and more fair because the hegemon follows the same rules and, often, shares the same beliefs.

36 But, if we extend Ikenberry and Kupchan’s analysis, a secondary nation’s substantive beliefs, like Great Britain’s, might have significant knock-on effects as that nation, and its agents begin to act on those beliefs in the world. Thus the effect of Chinese monetary hegemony cannot be confined to Europe. They rather seem to have followed European imperial forces – commercial and otherwise – as they sought to extend their own systems into the wider world. The power of European socialized beliefs, coupled with the real demands of conducting the China trade, have rarely been more evident than in the East India Company’s mid-eighteenth century conquest of Bengal.

37 As we have seen, Locke and Newton’s knowledge of the “Money of the World” had much to do with the operations of the Company, which had been founded with an exclusive license to ship specie abroad – in part, as Mun argued, because the goods they were able to bring back from the far east were worth so much more than the specie that was expended to get them. By the first decades of the eighteenth-century, Company accounting was done on a specie basis, reflecting both the centrality of the East Indies markets in India and China, and the specie-commodity basis of the pound sterling that Locke and Newton’s work had helped establish in law at home.<sup>41</sup> Still, the acquisition of specie for the China trade was a perpetual problem, in significant measure because its sources were controlled by Spain, an imperial rival and subject to considerable expense and variation.

38 The company’s leadership and the British parliament hoped that the *Diwani*, or right to tax, in Bengal that Robert Clive had acquired in 1765 would supply silver for the China market and eliminate the need for expensive, dangerous trips around the Cape of Good Hope. In 1768, the Company’s Court of Directors wrote that “The enlargement of the Trade to China to its utmost Extent is an object we have greatly at heart, not only from the Advantages in prospect, by gaining a Superiority and thereby discouraged Foreign Europeans from resorting to that Market; but also from a National Concern, where Revenue is very materially interested.”<sup>42</sup> Bengal was to provide the monetary base for this expansion. Clive expected the whole of the “China treasure” to come from India, and the Directors evidently did as well.<sup>43</sup> They immediately set to work extracting millions of pounds-worth of silver out of Bengal every year.

39 This was a striking reversal. Before the 1765, Bengal had generally exceeded China as a source of Asian commodities for European markets. In 1760, for instance, the Company imported to Britain goods valued £366,875 from Bengal and £324,099 from China.<sup>44</sup> As such, Bengal had also received a significant share of the Company’s silver exports from Europe. Gemelli Carter, who visited the Company’s Indian operations in 1695, believed that all of the gold and silver in the world must eventually have found its way to India.<sup>45</sup> This, however, was mistaken. As K.N. Chaudhuri noted in his survey of the company’s operations in prior to 1760, “India was the penultimate destination of the Spanish silver. For beyond South Asia were still the vast areas of Imperial China” where Bengali traders re-exported much of the silver in turn.<sup>46</sup> With the British conquest, however, the Company ceased sending silver to Bengal altogether, and directed its surplus from plunder and taxation to the China market. The fiscal benefits to the Company from this policy were obvious. The cost to Bengalis, however, would be measured in human lives.

40 Just seven years after the British took control, large areas of Bengal were practically a wasteland, with rice paddies cultivated for generations surrendered to the jungle. Between 1769 and 1773 approximately 10 million Bengalis, four times the population of British North America, starved to death or fled, as the East India Company compounded drought and crop failure with relentless tax collection and financial predation.<sup>47</sup> Company agents drove Bengalis unable to pay their taxes off their land and into cities like Calcutta, where they profited from a near monopoly on available grain few could afford.<sup>48</sup> In Murshidabad, the residence of the Nawab of Bengal, 500 people were starving to death each day in July 1770.<sup>49</sup> In Calcutta, the Company employed 100 “doolys, sledges, and bearers” to carry bodies and



dump them into the river Ganges.<sup>50</sup> They could not keep up with the corpses. In the meantime, according to one contemporary commentator, “the Company’s collectors compelled the living to pay the taxes of the dead”.<sup>51</sup> Tax collection did not decline with the population, Warren Hastings wrote to the Company’s the Court of Directors on November 3, 1772, only because it been “violently kept up to its former standard” even as, in the words of another writer, rice paddies became “like fields of dried straw,” and families sold their children, ate their seed grain and finally each other.<sup>52</sup> According to the current estimates, roughly two million people died – while another 8 million simply disappeared.<sup>53</sup>

41 Contemporary commentators linked the death toll to Britain’s relentless taxation. True, the monsoon had failed in 1769, creating drought conditions that would have created difficulties in any case. But, as Alexander Dow, an East India Company officer who witnessed the events put it: “Fortune, though unfavourable, was less fatal, than the rapacity of avaricious men.”<sup>54</sup> The problem was less a drain of the circulating medium, which for day-to-day exchange in afflicted rural areas was as likely to take place in cowrie shells or copper tokens as in higher-value silver coins, than it was Company priorities.<sup>55</sup> There was no general famine; other regions had food available. Yet the Company made virtually no effort to purchase it or transfer it to afflicted areas, while increased taxes made it difficult for Bengalis to do so for themselves. In Dow’s analysis, unlike the rulers they had supplanted, the Company did not yet have the sense to see “that their own power depended upon the prosperity of their subjects.”<sup>56</sup> According to William Wilson Hunter’s analysis of contemporary sources, the Company spent a total of £9,000 on relief over the course of crisis, compared with its 1769-1770 gross Bengal revenue of £2.1 million, or £1.45 million after expenses.<sup>57</sup>

42 Instead, the Company worried about the increasingly obvious dearth of Bengali silver. In 1772, the Company hired Scottish economic philosopher Sir James Steuart to help analyse this problem and suggest solutions. Stuart’s analysis, like Locke’s, is telling. It gives us a real sense of how Chinese hegemony, and the desire to subvert it, served as a primary impetus for the expansion of British Empire in Asia.

43 From the Company’s perspective the famine was less a human disaster than one element of a fiscal crisis indicating how central the China trade had become. In the eighteenth century the Company had hit on the tea trade as the most lucrative means of extracting more silver in the Atlantic than it spent acquiring goods in Asia. Tea was addictive, light and expensive, but purchasing it required massive amounts of silver. Eliminating approximately half of the farmers in Bengal threatened tax receipts based on the produce of the land.<sup>58</sup> The problem, as the Company saw it, had two components. First, there was less agricultural production, including but not limited to food. But second, there appeared to be too little money, silver rupees, to both pay taxes and purchase food. According to H.V. Bowen, by 1772 British officials seemed resigned to the fact that the entire region “had already been squeezed dry.”<sup>59</sup> This was a more serious problem than passing famine. Company officials hired Steuart, who had established himself as a leading scholar of money and fiscal administration with his two-volume “The Principles of Political Oeconomy” in 1767, to solve the fiscal end of the problem. His task was to diagnose company’s policy failures in Bengal and to propose a framework for solutions.

44 In Steuart’s analysis Bengal had been like a sponge sopping up silver passing towards China before the Company had been given a free hand. Before the East India Company under Robert Clive had secured the *Diwani* from the Mughal Emperor Shah Alam II, the region had remained in a rough equilibrium, with specie outflows to the East for tea, spices, silk and porcelain matched by specie inflows from Europe and the Middle East. Under Company leadership, silver was pouring out of Bengal with none being received in return. Company control had effectively shut down the import of silver from England to Bengal, Steuart observed. This was a matter of policy; indeed it was the Company’s primary interest. To pay for Bengali goods in “bullion by the India Company,” former Bengal Governor Henry Verelst wrote in 1772, “can never be done without sacrificing our own interests, and rendering the revenues of a distant country useless to Great Britain. Bengal, like other subjected provinces, must yield its tribute.”<sup>60</sup>

45 Rather than pay for Bengali manufactures and Chinese tea and porcelain with silver imported from Europe, the East India Company now purchased with silver extracted from the Bengalis themselves, Steuart wrote. Indeed, between 1760 and 1772, the Company imported no silver to India whatever.<sup>61</sup> Instead of purchasing silver in Britain and



46 The Company was not alone in taking advantage of British control, Steuart noted. In this view, the Company's conquest of Bengal was less a British event than a European one. "The China trade is what requires silver the most of any," Steuart wrote.<sup>63</sup> This was true, not just for Britain, but for European powers. The East India Company was not alone in seeking to avoid the expense of sending silver around Africa or overland through the Middle East, after purchasing it "at great expense" from Spanish merchants. Spaniards themselves had long sent the bulk of their American treasure across the Pacific from Acapulco. Other European merchants were also quick to sense opportunity in the British conquest, borrowing silver from private traders, "every illiterate mariner who could escape from a ship," as Verelst called them, who set about plundering northern India on their own account and in the Company's name, in hopes of securing a quick fortune to send home.<sup>64</sup> The other European companies, who offered bills of sale on European ports in return for ready cash, were the best available method.

47 "Now if they can borrow money from British subjects in our East-India settlements, at a lower rate than they can procure it at Cadix, there is little doubt but they will do it; and if British subjects can lend money to those nations at a higher rate than what they can procure to themselves by remitting through the cash of the East-India Company, there is little reason to doubt of their accepting such offers," Steuart wrote.<sup>65</sup>

48 While no official figures exist, it is possible to get a sense of the size of this side trade. Attempting to stem the flow of bullion to its competitors, the Company itself issued bills of exchange to private individuals for payment in Britain for £1,577,959, coming due in the 1771-1772 season alone, which bankrupted the company's London office, and helped prompt an imperial crisis in the Atlantic and a revolution in Britain's North American colonies.<sup>66</sup>

49 The demands of European merchants, the Company itself, and individual British subjects seeking to return fortunes to Europe had vastly increased demand for the silver "current rupees," Steuart argued, while British control drastically reduced supply. The result, he concluded, was that cash was more expensive for starving Bengali *ryots* to procure, making it more difficult for them to pay what the Company's tax farmers demanded of them, and to purchase food from outside Bengal to see them through the drought. Steuart suggested increasing paper money circulation in India, encouraging the sale of Bengali manufactures to other European powers, and ultimately seeking an alternative to silver exports for financing the China trade – a solution already being sought in opium production. In effect, he argued for reproducing the English financial revolution abroad – the path British officials eventually chose in the nineteenth century. He also suggested reducing the taxes on imports to Britain, to encourage company officials to send their wealth home in that form, rather than as loans to British competitors. The tea could then be sold cheaper to British subjects in Britain North America and other "British dominions", creating a monopoly that would more than compensate for the lack of customs revenue in Great Britain itself.<sup>67</sup> The result was what American colonists called the Tea Act, a proximate cause of the American Revolution.

50 The drive for silver both exacerbated the famine and precluded Company relief, for the reason that one of the most profitable methods of sending wealth from British India to Britain herself led through Chinese markets. In addition to dividends – which were increased even as the Company faced bankruptcy in 1772 – the Company had agreed to pay hundreds of thousands of pounds directly to the British exchequer. The Company's primary method for realizing that sum in Europe was to exchange bullion for tea to sell for more bullion. In Steuart's analysis the key measure of Company revenue was "the weight of silver."<sup>68</sup> The demand for high-quality silver in weight ordered the Company's rationality. Whatever the complicating local exigencies, it was one of the Company's primary motivations for expanding its territorial empire – even at the cost of millions of Bengali lives.<sup>69</sup>

51 Until the British conquest, and subsequent plunder of Bengal following the battle of Plassey in 1757, India had been one of the most important destinations for silver bullion exported by the British to Asia, in part because of inter-Asian demand for silver precipitated by Bengali merchants and financiers' own links with China's tributary sphere. Between all but ceasing export silver to Bengal and acquiring silver and other trade goods from Bengal for the China market, the Company and its various servants had benefited from the



52 For those benefits to continue in the short term, the flow of silver out of Bengal had to continue. The silver demands of the Chinese market seem to have shaped what value was for some British administrators. Verelst, for instance, dismissed Stuart's plan for a Bank of Bengal and a "paper credit" that might have allowed food purchases because, he argued, that there was no rational way to separate a notional unit of account and the means of payment, as Stuart did in his analysis. This followed directly from Locke's analysis of money, if not its unstated aims.

53 "As all our ideas are derived from the impression of material substance," Verelst wrote, affirming the concept empiricism associated with Locke and David Hume, "he who uses a term not expressing some such impression, discourses without an idea."<sup>70</sup> A monetary "standard," Verelst wrote, could not "have any other signification to express a certain quantity of current coin."<sup>71</sup> And the natural way to ascertain the value of a coin, in turn, was "the price of bullion in the market."<sup>72</sup> In Bengal, for example, when a coin is received in trade "it is necessary to estimate the intrinsic value of each piece, and calculate the whole mass by relation to" the fineness and weight of a well-known local coinage.<sup>73</sup>

54 Silver is "the only measure of commerce in Bengal," Verelst wrote, which is why shipping silver to China at the height of the famine was such a problem: nothing was available to pay for food.<sup>74</sup> Nonetheless, Verelst reasoned, the only solution was either a new gold coin or more silver. More silver must come either through trade with the Middle East or by sending less to China. "Dreaming of banks and paper credit," as Stuart had done, was folly, Verelst wrote. Real "wealth," silver, must be acquired through "increasing industry" in India, if Britain's extractive empire was to bear fruit.<sup>75</sup>

55 As with the financial revolution a century before, what is remarkable about this story is the centrality that the notion of money derived from the fact of Chinese demand still held for British imperial officials almost a century after the founding of the Bank of England. Similar concerns with silver had prompted the Grenville administration to tax Americans in silver bullion valued at five shillings and six pence per ounce, in 1765, leading to the Stamp Act crisis and the first sustained resistance in the colonies on principle of "no taxation without representation." Even after British institutions had solved the problem of the scarcity of money in Britain itself, they still confronted the problem squarely and necessarily in regard to maintaining and expanding its empire. For Verelst, even the idea that paper money could serve as a representation of metal was inadequate because of the demands of the China market, the source of the Company's profits and power. Indeed, the events of the Bengal famine suggest that the British Empire might have had a significantly different character without.

## Ottoman Money and Sovereignty

56 So far we have limited our exploration of Chinese hegemony to the British case, and with good reason. The British Empire, and England itself, has usually been held up as the most important single successful example of Western capitalist development, set in contrast to China and the rest of the world. We have suggested that the character and scope of the British Empire would have been significantly different without Chinese global hegemony.

57 We do not, however, mean to imply that Great Britain was alone in feeling the effects of Chinese hegemony, directly and indirectly. China's neighbors in Korea and Southeast Asia felt it on a much more pressing basis, but other trading regions with their own long traditions of exchange and money use were also affected indirectly by the fact of constant demand for silver abroad.

58 One prominent alternative example is the Ottoman Empire in the eighteenth-century. The international flow of silver specie east first led the Empire to adapt a majority silver coinage, and later contributed to a major debasement of the Ottoman silver money from the 1760s onwards. This, in turn, had two major impacts on Ottoman society: it contributed to problems of sovereignty, and engendered a lively debate on money and governance from the 1770s onwards, which would culminate in the large-scale imperial reforms, or *nizam-I cedit*, of Selim III (1762-1808).

The Ottomans did not adopt an official system of bimetallism until the nineteenth-century.



While both silver and gold coins (and sometimes copper as the lowest denomination) did exist within the Empire, throughout the early modern period no movement was made to impose anything like a fixed legal rate of exchange between these metals like those proposed by Newton. Instead, local markets determined the price relationship between the two metals. What did exist was a fixed exchange between diverse minor silver coins, which were more often used in everyday circulation. This had two implications. On the one hand, counter to the stated aims of Ottoman political theory, the system actually allowed for foreign money to circulate within the empire. On the other, debasements did not play as much a role in international trade because they mainly affected smaller denominations of coins.<sup>76</sup>

60 Starting in 1690, the Ottoman centre managed to establish a new silver unit, the *Kuruş* (its name derives from the German *Groschen*). While nominally gold coins did still exist, they subsequently played only a small part in minting activities. The Ottoman Empire had thus been integrated into the system of silver as the “money of the world”, as can be seen from trade contracts.<sup>77</sup> The imperial mint in Istanbul was until the 1760s reasonably successful in supplying silver coinage to a large geographical area from the Balkans to Anatolia, as well as to Syria and Iraq. This strengthening of monetary linkages between the centre and the periphery of the empire resulted in a period of commercial and economic expansion coupled with fiscal stability. The centralization of mint activity in the core regions of the Empire in a period without major war, between 1699 and 1774, are usually said to have contributed to this monetary stability, which paradoxically coincided with a period of political fragmentation.<sup>78</sup>

61 Despite the growing influence of the Cape Route the Ottoman Empire still was a major intermediary zone for silver denominated trade between Asia and Europe. This was in no small part due to low taxes and generous benefits offered to foreign traders; for while there were restrictions on internal commerce, “trade policy was extremely liberal with respect to long-distance trade.”<sup>79</sup> These long-distance accounts were marked by a rather large European (especially French) trade deficit with the Ottomans. The silver was flowing “forward into China.” The Ottomans profited from lower price for gold paid in silver than in Europe during the whole 18th century. Although the ratio fluctuated significantly, it mostly stayed below the European rate of 15:1.<sup>80</sup> Other factors were also at play. Until the 1730s coffee had been a major export from the Levant. South American coffee production ended this after 1730, and started to replace the Yemeni product on the Ottoman market itself. Against that, the Ottoman lands began to export more basic materials: the quantity of raw cotton exported to Marseilles increased more than twenty-fold during the eighteenth-century.<sup>81</sup>

62 Towards Asia, Ottoman external trade via either Iran or the Red Sea region accumulated a silver-denominated trade deficit, in no small part due to the silk trade. Ottoman officials had long criticized buying silk because of the silver outflows it entailed. While the trade with Iran became less important in the eighteenth-century, the south Asian road through the Indian Ocean rose in prominence. Even in 1785, Istanbul imports from India amounted to about the same sum as the total imports from Europe to the city.<sup>82</sup> The growing importance of the southern route against that also led to a larger status of the city of Alexandria in Egypt vis-à-vis other Levantine ports, which allowed Egyptian traders to retain their own silver money, the *para*, which had a lower standard or lower silver content. This was an issue of almost permanent concern for Istanbul statesmen. Since the exchange rate between the two units remained fixed in spite of the ever-widening political autonomy of Egypt, the divergence in the respective silver contents of Ottoman and Egyptian coins led to an outflow of silver from the center of the empire to Egypt. This flow could not be offset by the yearly remittances, which despite continuous demands for payment in Gold, were paid by Egyptian authorities in their own silver coins.<sup>83</sup>

63 Starting in the 1760s, the Ottoman monetary system experienced a rather rapid depreciation and a near-collapse during the 1790s.<sup>84</sup> This period is usually seen as the integration of the Empire as a periphery into the European World System, as well as the birth of the so-called “Eastern Question”. It has been argued that this had been caused by depreciating terms of trade and the disastrous wars with Russia in 1768-1774, after which the Ottomans lost control of the Black Sea trade, and further wars with Habsburg Austria and Russia in 1787-92.<sup>85</sup> Nonetheless, reduced flows of specie, though exacerbated by these developments, played a major part. The Ottoman realm was in dire need of silver, facing specie “scarcity” like the British had a century earlier.



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It was against this backdrop of rapidly deteriorating commerce that a broad discussion evolved among intellectuals about ways to reform the state system.<sup>86</sup> As will become clear, the issue of international flows of silver was very much on their minds. The “History of the Morea [Greek] Uprising” by Süleyman Penah Efendi will serve as an example. Penah Effendi wrote it in the years after 1770 as a report to the central bureaucracy on the state affairs in Greece.<sup>87</sup> He described the events of the uprising, later seen as a precursor to the Greek independence movement of the early nineteenth-century, and devoted a larger section to reforms meant to prevent future insurrections. While some of these reforms dealt with military or administrative matters, a large part concerned economic and financial matters.<sup>88</sup>

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Regarding the treasury, he touched upon a main strand of Ottoman and classic Islamic political philosophy: the necessity of coinage as a symbol of sovereignty, which the Islamic tradition itself drew from Aristotle’s Ethics. As in England, this ancient Greek influence was squared with more specific considerations. The philosopher Ibn Khaldun, for instance, believed that issuing of gold and silver money (*sikke*) with the name of the ruler was one of the most important symbols of sovereignty, along with having the Friday prayers read in one’s name.<sup>89</sup> In this tradition, the coins transmitted “royal power”, in a clearly expressed manner, circulating from person to person and area to area, bearing testimony to a ruler’s sway.<sup>90</sup>

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Yet precisely this power was deemed in danger. Penah Efendi articulated a general problem with bullion and coinage among the Ottomans. Like the British neo-Aristotelians, he believed there was a general shortage of specie in the world, and had a similar proscription: “because of this scarcity, the existing precious metals must be prevented from going to other countries”, he argued. He further identified the Eastern trade with India and Russia, as well as contemporary fashion for silver-embroidered clothing and hats to be the main culprits of bullion shortage in the Ottoman Empire.<sup>91</sup> Unlike the British Neo-Aristotelians, however, he proposed to limit specie outflow by either raising the nominal value or decreasing the bullion content, so that the value would not correspond to content. On top of that, he proposed fixed exchange rates for foreign coins to be enacted and controlled in order to draw coins of higher silver percentage, as well as a prohibition on the trade of certain luxury goods. He further advocated for a more centralized tax-system, to both control specie-flows and curb conspicuous consumption by local elites. Unlike the English, he presumed, in short, the power of the state. If these measures were taken, he argued, Ottoman coins would not be drained abroad or melted down to make gold or silver thread or jewellery, and the Eastern merchants would not be able to profit by sending currency east.<sup>92</sup>

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His admonishments did not achieve their aim, although many of them were echoed by other reformers of the period. No mercantilist policies in trade were enacted, while specie continued to flow out to the East, the terms of trade with Europe worsened and the Empire’s mines dried up from the middle of the century. The central state reacted with a number of centralizing reforms, from strengthening the role of the Imperial Mint to a change in the tax system aiming at increased and continuous cash flows to the central treasury.<sup>93</sup> Faced with increasing expenditure during the wars of the later eighteenth-century, and less silver specie available, the state reacted in a classic manner: by devaluating the currency, and partially restoring an emphasis on Gold as a sovereign currency.<sup>94</sup> This did not, however, prove to be a durable solution.

68

In the early decades of the nineteenth century Cairo (1834) and Istanbul (1844) undertook virtually identical monetary reforms, adopting the bimetallic system with fixed exchange rates between gold and silver coinage. They did this not so much by own design, but because of the rapid increase in trade with Europe, the growing interaction with European merchants and governments as well the pressure to conform to the new “requirements” of international trade focused in the west.

69

This had disastrous consequences. Both Egypt and the Ottomans began to borrow in European financial markets during the 1850s in order to meet their short-term budgetary needs. By the middle of the 1870s, with their annual debt payments far in excess of their ability to pay, both of them were forced to declare moratoriums on their outstanding debt. The establishment of the European Public Debt Administration in Istanbul by the European powers in 1881, and even more dramatically, the occupation of Egypt in 1882 by England were directly linked to these moratoria.<sup>95</sup> They are a reminder that while Chinese hegemony was pervasive, it did not employ the coercion European and American finance would in



70 If there is a through line in the Ottoman empire's early modern monetary history, it is that of a powerful empire overwhelmed by the sense that money was something outside of its control. This sense of helplessness came down to a matter of basic assumptions. Penah Efendi assumed that crucial means the empire had of manipulating money was primarily the weight and fineness of its coins. For him, the status of silver in the broader world as money valued by weight and fineness was assumed. His proscriptions, to manipulate the physical mass and fineness of currency and therefore alter aspects of the balance of trade to the East, were formulated within this framework. He offered them in the context of a system of belief that took silver's role in international trade as an empirical, timeless fact. Money itself as established by Chinese hegemony, and formulated by English eighteenth practice and thought, was not in question. Silver was money, and silver flowed east. What was in question was the power of governments to control and corral it. Penah Efendi seems to have experienced Chinese hegemony indirectly to be sure, but it structured the possibilities at play in his philosophy. It established the fact that silver went east and would be valued as it travelled by weight and fineness. Individual societies chose to deal with that fact, to oppose it, alter it or subvert it in various contingent ways. But understanding the choices they made in doing so important for understanding the origins of the modern world.

## Conclusion

71 It is not a coincidence that by the mid-eighteenth century British and Ottoman policy makers had the same basic definition of money as silver valued by weight and fineness. It was the result of Chinese hegemony, which through control of its trading sphere created silver "money" as a global fact. The present paper's arguments are necessarily partial, and rest on relatively few cases. However, we hope to suggest the necessity and productivity of future collaborative research of China's role in establishing a global trading culture that undergirded and motivated developments far from its immediate sphere, with actors further not necessarily aware of the Chinese role. Money is not a natural category, but where it is used, it is fundamental to the way societies operate, how governments and individuals work in the present and plan for the future. To change money, to control it, to establish its rules as fact on a global basis, is to reorder the world.

72 European empire, in particular the British Empire in India with its silver bullion and paddies turned to poppy fields, provided the means, ultimately, to subvert Chinese hegemony on its own terms, reversing the Chinese flow of silver in the 1830s and 1840s. Historians have often cited this as China's Achilles heel: It was exposed to foreign influence because of its regrettable reliance on overseas silver for its money supply. Few, however, say the same about England and its gold. Regardless, the Qing's grip on its regional tributary trading system remained strong for decades after. As Richard Von Glahn has argued, China's fate was not determined by silver. Silver's fate was determined by China.<sup>96</sup> It was only after Britain adopted and spread a counter-hegemony, the international Gold Standard, that China's global hegemony began to slip. Not coincidentally, it fell into the hands of China's most earnest and faithful students, who had built a global empire, in large measure to subvert its determination of the "balance of trade." In the nineteenth century, Great Britain and other European powers reformulated the rules of an older game. Like Penah Efendi, they did so on terms established by Chinese global hegemony.

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### Notes

1 Janet L. ABU-LUGHOD, *Before European Hegemony: The World System A.D. 1250-1350*, Oxford, Oxford University Press, 1991, p. 12.

2 In deploying the concept of hegemony we are deliberately interpolating between distinct yet by no means mutually exclusive meanings of the word in scholarly usage. The first stems from American historiography, where Jackson Lears and others have elaborated on Antonio Gramsci's ideas of cultural hegemony as a form of domination based on an apparently "spontaneous philosophy" established, in part by the placement of verifiably empirical facts, altering the content of both "common sense" and "empirical knowledge" to create an "entire system of belief." We believe that China's role in establishing silver bullion as the apparently "money of the world" meets this definition, notwithstanding that Gramsci's analysis was intended for the analysis of cultural hegemony within a



single state rather than a world system per se. This limitation, however, only makes sense if one believes that cultures bounded nationally, a notion which recent research has undermined fatally. T. J. JACKSON LEARS, "The Concept of Cultural Hegemony: Problems and Possibilities", *The American Historical Review*, 90, 3, 1 June 1985, p. 93-567, DOI: 10.2307/1860957. The second stems from world-systems analysis. In the context of the capitalist world system Wallerstein defines hegemony thusly: "Hegemony involves more than core status. It may be defined as a situation wherein the products of a given core state are produced so efficiently that they are by and large competitive even in other core states, and therefore the given core state will be the primary beneficiary of a maximally free world market. Obviously, to take advantage of this productive superiority such a state must be strong enough to prevent or minimize the erection of internal and external political barriers to the free flow of the factors of production; and to preserve their advantage, once ensconced, the dominant economic forces find it helpful to encourage certain intellectual and cultural thrusts, movements, and ideologies. Immanuel WALLERSTEIN, *The Modern World System II: Mercantilism and the Consolidation of the European World Economy 1600-1750*, New York, Academic Press, 1980, p. 38. Early modern China seems to meet this definition as well. Its fermented teas were consumed worldwide, and with its porcelain and silk defined luxury and taste well into the twentieth-century. China fares just as well on other, more quantitative measures of supremacy. In 1800 China had per-capita income roughly 10 percent higher than all of Western Europe, which had less than half China's population, making it without question the wealthiest polity on earth. Fernand BRAUDEL, *Civilization and Capitalism, 15th-18th Century*, 3, New York, Harper and Row, 1982, p. 544; Angus MADDISON, *The World Economy: A Millennial Perspective*, Paris, France, Development Centre of the Organisation for Economic Co-operation and Development, 2001, p. 384; Patrick Karl O'BRIEN and Armand CLESSE, *Two Hegemonies: Britain 1846-1914 and the United States 1941-2001*, Aldershot-UK, Ashgate, 2002. Dennis O. FLYNN and his collaborators have provided crucial analysis of China's centrality in evoking global trade, though they have avoided attributing this centrality to potency of China as a polity. Dennis O. FLYNN and Arturo GIRALDEZ, "Born with a 'Silver Spoon': The Origin of World Trade in 1571", *Journal of World History*, 6, 2, 1 October 1995, p. 21-201; Dennis O. FLYNN and Marie A. LEE, "East Asian Trade Before/after 1590s Occupation of Korea: Modelling Imports and Exports in Global Context", *The Asian Review of World Histories*, 1, 1, 31 January 2013, p. 49-117, DOI:10.12773/arwh.2013.1.1.117; Dennis O. FLYNN, "Comparing the Tokugawa Shogunate with Hapsburg Spain: Two Silver-Based Empires in a Global Setting", in James D. Tracy (ed.), *The Political Economy of Merchant Empires: State Power and World Trade, 1350-1750*, New York, Cambridge University Press, 1997; Arturo GIRALDEZ and Dennis O. FLYNN, "Cycles of Silver: Global Economic Unity through the Mid-Eighteenth Century", *Journal of World History*, 13, 2, 2002, p. 391-427, DOI:10.1353/jwh.2002.0035; *Global Connections and Monetary History, 1470-1800*, edited by Dennis O. Flynn, Arturo Giraldez, Richard Von Glahn, Aldershot-UK and Burlington-VT, Ashgate, 2003. The classic introduction to the notion of multiple early modernities the *Daedalus* special issue devoted to the topic in 1998. See Shmuel N. EISENSTADT and Wolfgang SCHLUCHTER, "Introduction: Paths to Early Modernities: A Comparative View" *Daedalus*, 127, 3, 1 July 1998, p. 1-18. For an earlier, influential analysis see ABU-LUGHOD, *Before European Hegemony: The World System A.D. 1250-1350*, Oxford, Oxford University Press, 1991. For one powerful critique of this approach see Sebastian CONRAD, "Enlightenment in Global History: A Historiographical Critique", *The American Historical Review*, 117, 4, 1 October 2012, p. 999-1027, DOI:10.1093/ahr/117.4.999.

3 A clarification is perhaps due here. By suggesting that China's monetary system coupled with China's role as a supplier of merchandises for the West implied the rise of silver metal as a standard for global exchanges, we are not conflating the Chinese and the global monetary systems, which remain separate entities. Indeed, it is precisely outside the space of political sovereignty that money inevitably acquires the characteristic of a commodity. However, given the central position occupied by China in global trades, we believe there existed a tight link between Chinese monetary system and the global silver standard, where the former helped shaping the latter. Such monetary hegemony is best appreciated on a deeper level: we think that the commodification of silver – that is, the very choice of silver rather than, say, gold, as global standard for settling transactions between the XVI and XIX centuries – was determined by Chinese practices.

4 C. R. BOXER, "Plata es Sangre: Sidelights on the Drain of Spanish American Silver in the Far East, 1550-1700", *Philippine Studies*, 18, 3, 1970, p. 461, p. 463.

5 For an influential analysis of contemporary "liberal hegemony," see G. John IKENBERRY, *Liberal Leviathan: The Origins, Crisis, and Transformation of the American World Order*, Princeton, Princeton University Press, 2011. For a cogent critique of Ikenberry's analysis see Sam MOYN, "Soft Sells: On Liberal Internationalism", in *Human Rights and the Uses of History*, London-UK, Brooklyn-NY, Verso, 2014, p. 121-134.

6 On the Great Divergence and the rough parity between China and industrializing early modern Europe see: Kenneth POMERANZ, *The Great Divergence*, Princeton, Princeton University Press, 2000; Roy Bin WONG, *China Transformed: Historical Change and the Limits of European Experience*, Ithaca, United States, Cornell University Press, 1997. For examples of the best work on global cultural exchange and hybridity see: Sanjay SUBRAHMANYAM, "Connected Histories: Notes towards a Reconfiguration of Early Modern Eurasia", *Modern Asian Studies*, 31, 3, 1 July 1997, p. 762-735, DOI:10.2307/312798; Sanjay SUBRAHMANYAM, *Courtly Encounters: Translating Courtliness and Violence in Early Modern Eurasia*, Cambridge-MA, Harvard University Press, 2012; By Sanjay SUBRAHMANYAM, "Holding the World in Balance: The Connected Histories of the Iberian Overseas Empires, 1500-1640", *The American Historical Review*, 112, 5, 1 December 2007, p. 1359-1385, DOI:10.1086/ahr.112.5.1359; Stuart B. SCHWARTZ, *Implicit Understandings: Observing, Reporting and Reflecting on the Encounters Between Europeans and Other Peoples in the Early Modern Era*, New York, Cambridge University Press, 1994; Inga CLENDINEN, *Ambivalent Conquests: Maya and Spaniard in Yucatan, 1517-1570*, New York, Cambridge University Press, 2003. For an example of comparative global history stressing interdependence see Prasannan PARTHASARATHI, *Why Europe*



7 On the centrality of the commodity form of money to capitalism see: Karl POLANYI, *The Great Transformation*, Boston, Beacon Press, 1957, p. 25-26, p. 75-76 et 212; Christine DESAN, *Making Money: Coin, Currency and the Coming of Capitalism*, Oxford, Oxford University Press, 2014; Andrew David EDWARDS, “The American Revolution and Christine Desan’s New History of Money”: *Law and Social Inquiry*, 15 August 2016, DOI:10.1111/lisi.12224; Antonio NEGRI, *Marx Beyond Marx: Lessons on the Grundrisse*, New York, Autonomedia, 1991, p. 10-40; Karl MARX, *Grundrisse: Foundations of the Critique of Political Economy*, New York, Penguin, 2005, p. 115-239; Karl MARX, *Capital: A Critique of Political Economy*, New York, Modern Library, 1906, p. 41-162. The importance of the commodity form of money to capitalism as analysed by Marx and other nineteenth-century authors is less obvious as a historical factor if one believes that the monetary form, the cultural and institutional content of the term money, is a trans-historical constant – extending in the popular analysis from Lydian electrum and Roman coinage to the present. This assumption, we believe, is fundamentally unhistorical, the result of an anachronistic notion of money projected on a heterogeneous past. The best recent scholarship on the history of money supports position. For recent challenges to the understanding of money for example see: Richard VON GLAHN, *Fountain of Fortune: Money and Monetary Policy in China, 1000-1700*, Berkeley, University of California Press, 1996; Daniel Lord SMAIL, *Legal Plunder*, Cambridge-MA, Harvard University Press, 2016; Mark METZLER, *Lever of Empire: The International Gold Standard and the Crisis of Liberalism in Prewar Japan*, University of California Press, 2006; Akinobu KURODA, “Anonymous Currencies or Named Debts? Comparison of Currencies, Local Credits and Units of Account between China, Japan and England in the Pre-Industrial Era”, *Socio-Economic Review*, 11, 1, 1 January 2013, p. 57-80, DOI:10.1093/ser/mws013; Akinobu KURODA, “Copper Coins Chosen and Silver Differentiated: Another Aspect of The ‘Silver Century’ in East Asia”, *Acta Asiatica*, 88, 2005, p. 65-86; Richard SEAFORD, *Money and the Early Greek Mind: Homer, Philosophy, Tragedy*, New York, Cambridge University Press, 2004; John SMITHIN, *What Is Money?*, Routledge, 2002; Nigel DODD, *The Social Life of Money*, Princeton, Princeton University Press, 2016; Luigi EINAUDI, “The Theory of Imaginary Money from Charlemagne to the French Revolution”, in Luigi Einaudi, Riccardo Faucci and Roberto Marchionatti (eds), *Luigi Einaudi: Selected Economic Essays*, Basingstoke-UK, New York-US, Palgrave Macmillan, 2006, p. 81-153; David GRAEBER, *Debt The First 5,000 years*, New York, Melville House Publishing, 2011; D. Graham BURNETT, “Relational Economics”, *Cabinet*, <http://www.cabinetmagazine.org/issues/50/burnett.php>; Mark PEACOCK, *Introducing Money*, London-UK, New York-US, Routledge, 2013; Geoffrey INGHAM, “Money is a Social Relation”, *Review of Social Economy*, 54, 4, 1 December 1996, p. 29-507, DOI:10.1080/00346769600000031; Shahzavar KARIMAZADI, *Money and Its Origins*, London-UK, New York-US, Routledge, 2013; Jane I. GUYER, *Marginal Gains: Monetary Transactions in Atlantic Africa*, Foreword by Anthony T. Carter, Chicago-US, London-UK, The University of Chicago Press, 2004; Marie-Thérèse BOYER-XAMBEU, Ghislain DELAPLACE, and Lucien GILLARD, *Private Money and Public Currencies: The 16th Century Challenge*, translated by Azizeh Azodi, Armonk-NY, ME Sharpe, 1994.

8 For a good overview of the silver supply story see Dennis O. FLYNN, “Comparing the Tokagawa Shogunate with Hapsburg Spain: Two Silver-Based Empires in a Global Setting,” in James D. Tracy (ed.), *The Political Economy of Merchant Empires: State Power and World Trade, 1350-1750*, New York, Cambridge University Press, 1997; Serge GRUZINSKI, *What Time Is It There*, Malden-MA, Polity, 2011.

9 E. BACKHOUSE and J. O. P. BLAND, *Annals and Memoirs of the Court of Peking*, Boston, New York, Houghton Mifflin, 1914, p. 322-331. A more recent translation renders the last line of Qianlong’s memorial: “The Celestial Empire, ruling all within the four seas, simply concentrates on carrying out the affairs of government properly, and does not set value on rare and precious things”. Mark C. ELLIOT, *Emperor Qianlong: Son of Heaven, Man of the World*, New York, Longman Publishing Group, 2009, p. 138. Elliot’s biography is a useful introduction to the Chinese claim to “universal rule” in the early modern era. In the introduction to his classic volume on the “Chinese world order” John Fairbank argued that “in Chinese terms the Far-Eastern world was Sinocentric, *T’ien-hsia*, ‘all-under-heaven’, presided over by ‘ien-tzu, the ‘Son of Heaven’, sometimes used to embrace the whole world including everything outside of China”. John King FAIRBANK (ed.), *The Chinese World Order: Traditional China’s Foreign Relations*, Cambridge-MA, Harvard University Press, London-UK, Oxford University Press, 1968. For a more recent take see Brantly WOMACK, *China among Unequals: Asymmetric Foreign Relationships in Asia*, Singapore, Hackensack-US, London-UK, World Scientific, 2010.

10 Fernand BRAUDEL, *Civilization and Capitalism, 15th-18th Century*, 3, New York, Harper and Row, 1982, p. 484-534; Mark C. ELLIOT, *Emperor Qianlong: Son of Heaven, Man of the World*, New York, Longman Publishing Group, 2009, p. 141; Takeshi HAMASHITA, *China, East Asia and the Global Economy*, Linda Grove and Mark Selden (eds), New York, Routledge, 2008, p. 29, p. 49.

11 Richard VON GLAHN, *Fountain of Fortune: Money and Monetary Policy in China, 1000-1700*, Berkeley, University of California Press, 1996, p. 57, p. 60; Peter SPUFFORD, *Money and its use in medieval Europe*, New York, Cambridge University Press, 1988, p. 204-205; Akinobu KURODA, “The Eurasian Silver Century, 1276-1359: Commensurability and Multiplicity”, *Journal of Global History*, 4, July 2009, p. 249, p. 254.

12 P. SPUFFORD, *Money and its use in medieval Europe*, Cambridge, Cambridge University Press, 1988, p. 394; Marie-Thérèse BOYER-XAMBEU, Ghislain DELEPLACE, Lucien GILLARD, *Private Money and Public Currencies: The 16th Century Challenge*, translated by Azizeh Azody, Armonk-NY, ME Sharpe, 1994; Craig MULDRAW, *The Economy of Obligation: The Culture of Credit and Social Relations in Early Modern England*, New York, St. Martin’s Press, 1998; Luigi EINAUDI, “The Theory of Imaginary Money”, in Luigi Einaudi, Riccardo Faucci and Roberto Marchionatti (eds), *Luigi Einaudi: Selected Economic Writings*, New York, Palgrave Macmillan, 2006, p. 153-181; Christine DESAN, *Making*



- 13 VON GLAHN, *Fountain of Fortune*, Berkeley, University of California Press, 1996, p. 83-112; Akinobu KURODA, "Anonymous Currencies or named Debts? Comparison of Currencies, Local Credits and Units of Account between China, Japan and England in the pre-industrial Era", *Socio-Economic Review*, 11, 1, 1 January 2013, p. 57-80, DOI.org/10.1093/ser/mws013.
- 14 C. NORTHCOTE PARKINSON, *Trade in the Eastern Seas, 1739-1813*, Cambridge, Cambridge University Press, 1937, p. 317. Quoted originally in Carl A. TROCKI, *Opium, Empire and the Global Political Economy: A Study of the Asian Opium Trade 1750-1950*, London-UK, New York, Routledge, 1999, p. 42.
- 15 Rice VAUGHAN, "A Discourse of Coin and Coinage: The First Invention, Use, Matter, Forms, Proportions and Differences, Ancient and Modern: With the Advantages and Disadvantages of the Rise or Fall Thereof, in Our Own or Neighbouring Nations: And the Reasons from the Original of Vaughan", in John Ramsay, McCulloch (eds), *A Select Collection of Scarce and Valuable Tracts on Money*, London, printed for the Political Economy Club, 1856, p. 89.
- 16 J. FAIRBANK, *The Chinese World Order: Traditional China's Foreign Relations*, Cambridge-MA, Harvard University Press, 1968, p. 13; Dennis O. FLYNN and Arturo GIRALDEZ, "Born with a 'Silver Spoon': The Origin of World Trade in 1571", *Journal of World History*, 6, 2, 1 October 1995, p. 201-222; William S. ATWELL, "International Bullion Flows and The Chinese Economy Circa 1530-1650", *Past and Present*, 95, 1, May 1982, p. 68-90.
- 17 For a good overview of the European entrance into Asian trade see Michael N. PEARSON, *The Indian Ocean*, New York, London, Routledge, 2003, p. 167.
- 18 Cotton MATHER, *Some Considerations on the Bills of Credit*, Boston, Benjamin Harris and Joe Allen, 1691, p. 6-7; Jacob PRICE, *Overseas Trade and Traders: Essays on the Commercial, Financial and Political Challenges of British Atlantic Merchants, 1660-1775*, Brookfield-VT, Variorum, 1996, p. 272.
- 19 Craig MULDREW, *The Economy of obligation: The culture of Credit and Social Relations in Early Modern England*, London, Palgrave Macmillan, 1998; Carl WENNERLIND, *Casualties of Credit: The English Financial Revolution, 1620-1720*, Cambridge-MA, Harvard University Press, 2011.
- 20 Barbara OBERG and J. Jefferson LOONEY (eds), *The papers of Thomas Jefferson Digital Edition*, Charlottesville-VA, University of Virginia Press, 2009, "To John Wayles Eppes", <http://rotunda.upress.virginia.edu/founders/TSJN-03-06-02-0458>.
- 21 See among others Berry Emanuel SUPPLE, *Commercial Crisis and Change in England 1600-1642: A Study in the Instability of a Mercantile Economy*, Cambridge-UK, University press, 1959 and Joyce APPLEBY "Locke, Liberalism and the Natural Law of Money", published by Oxford University Press on behalf of The Past and Present Society, 71, May, 1976, p. 43-69.
- 22 "Drawing on the example of the Bank of Amsterdam, metal coin came to be understood by many as nothing else but a kind of security which men receive upon parting with their commodities", C. WENNERLIND, "Credit-Money as the Philosopher's Stone: Alchemy and the Coinage Problem in seventeenth-century England", *History of Political Economy*, 35 (Annual Supplement), 2003, p. 250.
- 23 Michel FOUCAULT, *The Order of Things: An Archaeology of the Human Sciences*, New York, Vintage Books, 1994, p. 168, p. 170, p. 177; John Maynard KEYNES, *The General Theory of Employment, Interest and Money*, New York, Harcourt, 1964, p. 334.
- 24 John SHAW (ed.), *Charters Relating to the East India Company from 1600 to 1761: Reprinted from a Former Collection with Some Additions and a Preface for the Government of Madras*, Madras, London, R. Hill at the Government Press, 1887, p. 10, p. 39; K. N. CHAUDHURI, "Treasure and Trade Balances: The East India Company's Export Trade, 1660-1720", *The Economic History Review*, 21, 3, 1968, p. 8-497; John CRAIG, *The Mint: A History of the London Mint from A.D. 287 to 1948*, New York, Cambridge University Press, 1953, p. 191; Neil MCKENDRICK, John BREWER and John Harold PLUMB (eds), *The Birth of a Consumer Society: The Commercialization of Eighteenth-Century England*, Bloomington-IN, Indian University Press, 1982, p. 206.
- 25 Thomas MUN, *England's treasure by foreign trade*, Glasgow, R. and A. Foulis, 1755, p. 7; Christine DESAN, *Making Money: Coin, Currency, and the Coming of Capitalism*, Oxford, Oxford University Press, 2014, p. 331; C. WENNERLIND, *Casualties of Credit: The English Financial Revolution, 1620-1720*, Cambridge-MA, Harvard University Press, 2011, p. 19.
- 26 David ORMROD, *The Rise of Commercial Empires: England and the Netherlands in the Age of Mercantilism, 1650-1770*, New York, Cambridge University Press, 2003; Charles WILSON, "Treasure and Trade Balances: The Mercantilist Problem", *The Economic History Review*, 2, 2, 1949, p. 152-161; Henrik LANGELÜDDECKE, "'I Finde All Men and My Officers All Soe Unwilling': The Collection of Ship Money, 1635-1640", *Journal of British Studies*, 46, 3, 1 July 2007, p. 42-509.
- 27 C. DESAN, *Making Money: Coin, Currency, and the Coming of Capitalism*, Oxford, Oxford University Press, 2014; Steven C. A. INCUS, *1688: The First Modern Revolution*, New Haven, Yale University Press, 2009; Peter George Muir DICKSON, *The Financial Revolution in England: A Study in the Development of Public Credit, 1688-1756*, Melbourne, Macmillan, 1967; L. EINAUDI, "The Theory of Imaginary Money". For an early version of this argument see Earl J. HAMILTON, "American Treasure and the Rise of Capitalism (1500-1700)", *Economica*, 27, November 1929, p. 338-357.
- 28 A. FEARVEARYER, *The Pound Sterling: A History of English Money*, Oxford, Clarendon Press, 1931, p. 115.
- 29 Among others, Sir Dudley NORTH investigated the problematic of a general re-coinage in his 'Discourses upon Trade' issued in 1691, Baltimore-MD, Lord Baltimore Press, 1907.
- 30 Thomas Babington MACAULAY, *The History of England, from the Accession of James II - Volume 5*,



New York, Harper and Brothers, 1850, p. 90.

31 At least until 1696, when new laws envisaging capital punishment for forgers were approved and implemented. It is worth considering this change in legislation in the context of the simultaneous implementation of paper credit and hard currency. Geoffrey INGHAM, *The Nature of Money*, Cambridge, Polity Press, 2004, p. 128, wrote that 'As credit money became the most common means of transacting business, England also moved towards the creation of the strongest metallic currency in history'. See also Carl WENNERLIND, *Casualties of Credit: The English Financial Revolution, 1620-1720*, Cambridge-MA, Harvard University Press, 2011.

32 Richard VON GLAHN, "Money-Use in China and Changing Patterns of Global Trade in Monetary Metals, 1500-1800", in Clara Eugenia Núñez (ed.), *Historia Monetaria: Una Perspectiva Global, 1500-1808*, Sevilla, Universidad de Sevilla, 1998, p. 57.

33 C. WENNERLIND, *Casualties of Credit: The English Financial Revolution, 1620-1720*, Cambridge-MA, Harvard University Press, 2011, p. 148; Takeshi HAMASHITA, *China, East Asia, and the Global Economy: Regional and Historical Perspectives*, New York, Routledge, 2008, p. 49; John LOCKE, *Some Considerations of the Consequences of the Lowering of Interest, and Raising the Value of Money. In a Letter Sent to a Member of Parliament [i.e.] Sir John Somers*, London, Awnsham and John Churchill, 1692, p. 47, p. 49.

34 J. LOCKE, *Further Considerations Concerning Raising the Value of Money. Wherein Mrs. Lowndes's Arguments for it in his late Report concerning An Essay for the Amendment of the Silver Coins, are particularly Examined*, London, A. and J. Churchill, 1695, p. 9.

35 Timothy BROOK, *Vermeer's Hat: The Seventeenth-Century and the Dawn of the Global World*, London, Profile Books, 2009, p. 154.

36 K. N. CHAUDHURI, "Treasure and Trade Balances: The East India Company's Export Trade, 1660-1720", *The Economic History Review*, 21, 3, 1968, p. 498; John LOCKE, *Further Considerations Concerning Raising the Value of Money*, London, A. and J. Churchill, 1695, p. 20-21.

37 For one example, which prefigures some of our arguments, see K. N. CHAUDHURI, *The Trading World of Asia and the English East India Company, 1660-1760*, New York, Cambridge University Press, 1978, p. 153-189.

38 Isaac NEWTON, "On the Value of Gold and Silver in European Currencies and the Consequences on the World-wide Gold and Silver-Trade, 25 September 1717", in William Shaw (ed.), *Select Tracts and Documents Illustrative of English Monetary History 1626-1730*, London, Wilsons and Milne, 1896, p. 166-171.

39 Thomas PAINE, *The Complete Writings of Thomas Paine*, Philip S. Foner (ed.), York, Citadel Press, 1945, p. 2, p. 674.

40 G. John IKENBERRY and Charles A. KUPCHAN, "Socialization and Hegemonic Power", *International Organization*, 44, 3, 1990, p. 283.

41 K. N. CHAUDHURY, *The Trading World of Asia and the English East India Company, 1660-1760*, New York, Cambridge University Press, 1978, p. 65-464.

42 Letters of Court, November 11, 1768, quoted in Sanjay GARG, "History of the Currency Legislations of the East India Company, 1772-1835, in *The Sikka and the Raj: a History of Currency Legislations of the East India Company, 1772-1835*, New Delhi, Manohar Publishers and Distributors, 2013.

43 Letters of Court, November 11, 1768, quoted in Sanjay GARG, "History of the Currency Legislations of the East India Company, 1772-1835, in *The Sikka and the Raj: a History of Currency Legislations of the East India Company, 1772-1835*, New Delhi, Manohar Publishers and Distributors, 2013.

44 K. N. CHAUDHURY, *The Trading World of Asia and the English East India Company, 1660-1760*, New York, Cambridge University Press, 1978, p. 510, Table C.2.

45 K. N. CHAUDHURY, *The Trading World of Asia and the English East India Company, 1660-1760*, New York, Cambridge University Press, 1978, p. 153-155.

46 K. N. CHAUDHURY, *The Trading World of Asia and the English East India Company, 1660-1760*, New York, Cambridge University Press, 1978, p. 155, p. 160, p. 182.

47 William Wilson HUNTER, *The Annals of Rural Bengal*, [4th (ed.)], London, Smith Elder and Co., 1871, p. 32; Richard PRICE, *An Essay on the Population of England, from the Revolution to the Present Time: With an Appendix, Containing Remarks on the Account of the Population, Trade, and Resources of the Kingdom*, in *Mr. Eden's Letters to Lord Carlisle*, London, T. Cadell, 1780, p. 14.

48 Pandit SUNDERLAL, *How India Lost Her Freedom*, [4th (ed.)], Bombay, Popular Prakashan, 1970, p. 78.

49 David ARNOLD, "Hunger in the Garden of Plenty the Bengal Famine of 1770", in Alessa Johns (ed.), *Dreadful Visitations: Confronting Natural Catastrophe in the Age of Enlightenment*, New York, Routledge, 2013, 84.

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## Pour citer cet article

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